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2 T-COMMERCE:
3 DOING BUSINESS OVER TELEVISION
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8 NATIONAL CABLE TELEVISION ASSOCIATION
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14 International Exhibition
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1 interactive television and as it relates to this particular panel the
2 development of commerce over the television.

3 I would like to introduce, beginning on my nearest left
4 here, Dave Delbacaro, President of Music Choice. Next to Dave is
5 Richard Fisher, President of Respond TV; Mary Pat Blake, who has joined
6 us from Charter Communications, Senior Vice President of Marketing and
7 Programming. Next to Mary Pat is Joel Hassell, the President and CEO of
8 Intelocity; and at the far end, Dave Limpe, Senior Vice President of
9 Corporate Development for Liberate Technologies.

10 It has been interesting for me as I look at the products and
11 services that have been presented here at the show and through the
12 booths as to how much again excitement there is around what we are
13 seeing and what the possibilities are for interactive television, but
14 one of the things that I have experienced personally throughout the show
15 is that it has been difficult to get very deep beyond what it is that
16 perhaps the user interface is, what it is beyond the remote control and
17 the ability to order a pizza or get a brochure off of an advertisement.

18 It has been difficult to try and garner all of the
19 components and all of the infrastructure and all of the other
20 technologies that may be involved to truly deliver an interactive
21 television commerce application, product and service seamlessly to cable
22 customers. It needs to be open. It needs to be easy for the customer

1 and it is going to be very interesting to see how the strategies more
2 forward and how the technologies support the strategies to deliver
3 T-Commerce.

4 The panel this morning has been designed to bring together
5 the perspectives of several executives with key companies that are
6 actively involved in the development of commerce applications and the
7 realization of commerce over television. I would like to position this
8 at a broad spectrum where at one end of the spectrum, in the very --
9 let's call it the foundation or the fundamental end of the spectrum are
10 the platform providers, companies like Liberate Technologies, Microsoft
11 TV, Open TV and others who are developing the applications that are
12 running on today's existing set-top boxes and being designed for
13 advanced set-top boxes that are in the works and expected by the end of
14 the year.

15 At the other end of the spectrum we have companies like
16 Charter Communications. Charter, as you know, is a 6.2 million customer
17 SMO based in St. Louis. They are actively involved in significant
18 technology and product development relationships within the computer and
19 advanced services industries through primary ownership by Paul Allen,
20 co-founder of Microsoft and through relationships with other companies
21 within the Allen Portfolio of Companies.

22 With Liberate at one end of the spectrum, they are providing

1 the views of a leading provider of open standard software platform
2 development whose goals are to create an environment for the enabling of
3 Internet standards being developed for wireless devices, embedded
4 systems and interactive television.

5 Liberate is delivering software technology foundation,
6 enabling the advanced set top boxes we have talked about to bring
7 together TV, Internet in the convergence of these environments for
8 commerce.

9 Enabling the opportunities of T-Commerce in between these
10 two ends of the spectrums are a variety of companies. Intelocity as an
11 example helps content providers and network providers develop
12 interactive television systems and application requirements,
13 architecture and interfaces across many interactive television
14 platforms.

15 Intelocity likes to refer to themselves as the glue that
16 brings together and keeps platforms applications and content together
17 for an interactive television user experience that remains first and
18 foremost a television experience.

19 Respond Television, Respond TV is truly focused on the
20 development of interactive advertising and commerce. Respond TV
21 provides an ETV infrastructure offering hosting and reporting services
22 that allow television programmers and cable and satellite operators to

1 capitalize on the deployment of ETV-enabled set top boxes. Allowing
2 one-to-one personalization and two-way exchange Respond TV enriches the
3 viewer experience while introducing new revenue streams for its clients
4 and their partners.

5 Music Choice is our content provider on the panel this
6 morning, with David Delbacaro, and they are the largest provider of
7 digital music content audio over the television to cable and satellite
8 providers with over 15 million customers worldwide.

9 Music Choice is changing along with the changing interactive
10 television landscape. Music in and of itself provides an area of
11 opportunity to expand on how this form of entertainment is accessed and
12 interacted with. The retail music industry continues to grow and Music
13 Choice through television and Internet and other mediums has an
14 opportunity to make the purchase of music more interactive, more
15 accessible and more satisfying than traditional retain environments.

16 So again this panel will explore in more detail the
17 positions of each of these companies, and their position on what they
18 believe is taking place for T-Commerce, general strategies for the
19 enabling and leveraging of T-Commerce, various issues and roadblocks to
20 pervasive delivery of T-Commerce and their visions for the future of
21 T-Commerce.

22 With that, I would like to begin with just a very general

1 question, just so that we are all clear in our minds what is T-Commerce?
2 I am going to join the panelist over here. Are these microphones on?
3 Can you guys hear this? Okay.

4 MR. LIMPE: I would like to take a stab at that, if I could.
5 There was a question somebody asked me the other day and I figured I
6 would talk to my CTO and get an answer. I had to write this down.

7 It is an MSO provision sub-based, v-to-c play, leveraging
8 the ITV capabilities of an ASTB with an RF return instead of a PC and an
9 ISP.

10 MR. RIAL: Think of the market cap.

11 SPEAKER: Exactly. I think that is a definition my
12 grandmother would understand and so it was pretty succinct and so I
13 think all of us can follow that.

14 MR. RIAL: What more is there to say?

15 MR. FISHER: Actually I think T-Commerce has been around for
16 quite a long time. A lot us experienced it even as children. Back then
17 the broadband delivery was really probably a UHF channel with somebody
18 hawking something there, back to my days it was a cartoon character
19 named Blinky that was trying to sell me something.

20 The return channel was a telephone and that is sort of how
21 T-Commerce started and for me it is television commerce and I think we
22 lose sight of the fact that television has been a commerce vehicle for

1 quite a long time and so when I think of T-Commerce I think nowadays we
2 are focusing on the interactive nature of it, but we ought to not lose
3 sight of the fact that T-Commerce -- television has always been a
4 commerce vehicle.

5 MR. RIAL: Dave, would you care to take a --

6 MR. DELBACARO: Well, I think the interesting question on
7 T-Commerce is how do we, what can we expand on it, you know, for example
8 in music I think the interesting thing is rather than simply allowing
9 people to buy music through another forum, you know, for example when
10 you are on the Internet you can go buy a CD rather than for example go
11 to a store. What is going to be different about T-Commerce and marrying
12 traditional let's say television commerce -- as Joel said, it's been
13 around for awhile with the broadband capabilities of cable television.

14 We can now change the way music is consumed completely and
15 you can buy music when you hear it. You can buy music when you have
16 learned to like it, when you listen to it, and you can now buy it in a
17 form that you couldn't before, so instead of buying just a CD you will
18 actually buy the music itself, the file itself.

19 The unique thing that cable television or satellite
20 television allows is by having that broadband distribution system we can
21 broadcast that file into the home without requiring a large two-way
22 interactive capability and so I am listening to it. I now can buy it

1 and I think it's going to spark a revolution in music consumption.

2 No longer will you be going to a store to buy music. Ten,
3 fifteen years from now kids will grow up and have no knowledge of what a
4 CD is, just like today they have no knowledge of what a record is, and
5 so I think television cable married with the broadband pipe allows
6 different types of consumption that have ever happened before, and I
7 think music is probably the quintessential example or will be.

8 MR. RIAL: Mary Pat, what do you believe from the operator's
9 perspective, being the network operator and ultimately the gatekeeper,
10 if you will, to the consumers, what do you believe are the primary
11 T-Commerce drivers from Charter's perspective?

12 MS. BLAKE: Well, the primary T-Commerce drivers are
13 obviously transactions with customers providing them real goods and
14 services, you know, over the TV, and advertising, but there is another
15 aspect to this whole topic that I think often gets overlooked and that
16 is that what we are really talking about is the customer receiving goods
17 and services that make their lives easier.

18 They don't have to go out in a car to run around and do
19 those errands on a Saturday morning. They have more control over their
20 time -- this is our vision of the future, at least, more control over
21 their time so they can spend their time doing the things that they want
22 to do with their family and friends, things that are meaningful to them

1 rather than going to the grocery story, for example -- and forgive me,
2 my packaged good friends, but, you know, that is not a lot of fun.

3 For us, for Charter, what it really means is getting an
4 interactive platform in place that allows customers to really have some
5 very cool lifestyle changes. We think that that is a very sticky
6 platform. I actually think one of the biggest revenue drivers in this
7 whole thing is going to be reduced churn for our core service, and then
8 on top of that of course you have got hopefully a lot of e-commerce
9 revenues as well as advertising.

10 MR. RIAL: So reducing churn is obviously of huge value in
11 the development of T-Commerce but do you believe that T-Commerce helps
12 and aligns well with traditional revenue drivers like Pay Television,
13 like premium services?

14 Does it add value?

15 MS. BLAKE: Yes. I mean we are exploring a lot of
16 opportunities with our partners in terms of thinking through how could
17 this technology really provide some value added to our customers. We
18 posed the question to our partners, our content providers, because I
19 think it has a lot of potential, so there isn't any one answer to it.
20 For David, it is going to be something different, for other content
21 providers they are going see new avenues for -- having kids get value
22 added services through the TV in a very child-friendly and safe way.

1 That is the fun part of this whole thing from my perspective
2 and that is that the technology that is here, thankfully provided by a
3 number of people up here on this panel, as well as the content is going
4 to just really change how people interact with the various boxes, if you
5 will, in their home, and it also opens up a world of opportunity in
6 terms of new people and places that they can be interacting with.

7 MR. RIAL: How does Charter envision the rollout, if you
8 will, of T-Commerce? Have you identified particular segments of your
9 marketplace that you will approach first with T-Commerce or is there a
10 plan to really be ubiquitous with this kind of an application?

11 MS. BLAKE: We are really working on that now, understanding
12 our customers and what it is that they are interested in, so to be quite
13 frank, I am going to sidestep it because I am going to be a whole lot
14 smarter in about six weeks.

15 [Laughter.]

16 MS. BLAKE: To be more precise.

17 MR. RIAL: Six weeks -- everybody mark your calendars call
18 Mary Pat in six weeks.

19 David, maybe you can, moving to the other end of the
20 spectrum, perhaps you could enlighten us on what is a platform provider
21 and what is the role in interactive television and T-Commerce?

22 MR. LIMPE: Platform provider is a fairly simple definition.

1 There is good examples of it throughout the computing industry. It is
2 the thing to which content and applications, the things that really
3 matter, are written, and our sole goal in life is to make sure that if
4 somebody writes an application once it can be delivered across all of
5 these platforms so that if charter, if L.A. Basin has Scientific Atlanta
6 boxes and St. Louis has GI-based boxes that they can preserve their
7 investment in one application that can run across all that plant. It is
8 just that simple.

9 A lot of work goes behind it but I think that what we are
10 really driving for is not just to rearrange the money and the pie. If
11 we are just taking the fixed pie that is out there today and moving it
12 to different people, I don't think we have done our duty. We may as
13 well go back to the Pocket Fisherman and finish that way and everything
14 will be fine.

15 SPEAKER: I like the Pocket Fisherman.

16 MR. LIMPE: I did too, actually. I was a big fan. That
17 said, I think what we can do is introduce efficiencies into this market
18 that are just not there today. If you think about the tens of billions
19 of dollars that are spent on TV advertising today, they really have one
20 purpose. It is to get the brand or product that you are advertising in
21 the consumer's mind long enough such that when they get to a point that
22 they can purchase that, they remember that brand or product.

1 That is why so many MBAs go to Procter & Gamble, all
2 right? -- to learn that exact skill, and if we can move that point of
3 purchase to the point of advertising, there is inherent efficiencies
4 that are built into that model.

5 The only data we are seeing and certainly the UK is a great
6 marketplace for us where we have hundreds of thousands of subscribers
7 rolled out today in two-way cable plant, and what Mary Pat said is
8 exactly true. We are seeing commerce happening. We are seeing these
9 are sticky apps. People are using them every single day and in cable
10 and wireless two great things are happening -- churn is at the lowest
11 levels that they have ever had it in their digital subscriber base, down
12 well under 5 percent from 25 percent, and the number of new subscribers
13 they are attracting to their digital service beyond their installed
14 analog base that they are upgrading is over 40 percent, so these are
15 just real facts that say if you are a network operator, if you are a
16 content provider, these efficiencies will allow you to get new customer
17 bases and make more money and that is what it is all about is making
18 more dollars.

19 MR. RIAL: I want to go back to your early point on the
20 simplicity aspect of writing an application one time, having it be
21 available on multiple platforms, and of course your comment that there
22 is a lot of work that goes behind that.

1 I am interested in -- a big part of what I haven't seen at
2 the show thus far is how content providers -- Mary Pat is making
3 partnerships with content providers and looking for those sticky
4 applications -- how do content providers really navigate through these
5 waters? Is it as simple as it sounds or as it is being put forward to
6 sound?

7 MR. LIMPE: Well, I don't think anything in this business is
8 as simple as it sounds. If so, then we wouldn't need 500 engineers
9 working on this all day and they would not have had to create the GO to
10 do this, so I mean I think the issue here is that we are trying to make
11 it simpler.

12 I think standards come into a big play here, which is if
13 we -- there's two great examples. If we take the battleground of
14 application standards to the consumer or carriage to the consumer
15 everybody loses. You can go back to the '70s and look at VHS and Beta.
16 You can look most recently at Disney and Warner.

17 There is no win when you do that and so I think that even
18 though I have pretty hefty competitors with people like Microsoft, it is
19 the platform providers' duty to the consumer and to the network
20 operators to make sure we agree on the standards, that we come up with
21 one specific standards through forms like in the U.S. open cable,
22 overseas DVB-MHB to be able to say that if you write your application to

1 Microsoft TV I guarantee you that it will work on Liberate and the
2 opposite is true too.

3 Are we there? Is it perfect? No, it is not done yet.
4 There is still work to do, but I think that it is good to have partners
5 on the panel, too, but whether it be Richard or Joel, these are the kind
6 of companies that are going to help the Charters of the world, the
7 Digeos of the world get this stuff out quicker because they are the sort
8 of layer between a pure technology play, which is Liberate, and the
9 people that can actually get those services out, the aggregators, the
10 people that can make it simpler, and they can accelerate the time to
11 market for these people.

12 If I can get 95 percent there, one application on mine runs
13 95 percent of what could run on Microsoft TV and vice versa, then I
14 think this in-between step and these guys can allow that extra 5 percent
15 and get that done and manage that, and if we can get there in the next
16 year, I think we have totally succeeded.

17 MR. RIAL: I would like to hear from both and Joel and
18 Richard on that topic as well.

19 MR. FISHER: Well, actually that is the sweet spot that my
20 company, Respond TV, focuses on. We are actually in a unique space in
21 that every day, every time we work on an application for a customer, our
22 customers being the programming services or the broadcast networks or

1 broadcast stations, we need to make sure that it works on Microsoft's
2 middleware and Liberate's middleware and any other standards-based
3 middleware that comes out.

4 That is basically the foundation of our company, to make
5 sure it is write once - read anywhere solution.

6 I agree with what has been said here, that if it is not made
7 simple, it isn't simple to do, we all know that sitting in here, but the
8 truth is that if it isn't simple, relatively simple, and very cost
9 effective from the programmer's point of view, the business will never
10 take off. It becomes the business of writing in a lot of proprietary
11 tool sets. That can be very expensive and very hard to train people,
12 very hard to maintain that.

13 It has to be very much the same way it's become on the
14 Internet, which is that everybody has got a group of people writing web
15 pages and it is the exact same foundation actually that the standards of
16 that that they are based on, which is when you build an application,
17 you, Respond TV, you start using HTML and Java Script, which means that
18 that huge group of people out there who know how to do this can within a
19 few days of training using the help that Respond TV and companies like
20 Respond TV give them suddenly be in a position to put those applications
21 on the air.

22 I think that unless we are able to get to a point where it

1 is as cheap to do an enhancement with a program -- or I should say as in
2 inexpensive to a program, an enhancement with a program or with an
3 advertisement as it is to put up a web page or two -- that business
4 won't accelerate and take off.

5 I think that we are starting to see that happen now but, as
6 Dave points out, when we write something and maybe we first write it to
7 Liberate, there will be a 10 or 15 percent set of oddities, if you will,
8 that you have, and you have to work towards correcting when it runs on
9 the other middleware, but that used to be as little as -- four, five
10 months ago, that might have been 30 percent and how quickly -- the
11 maturation of the process is really happening fast.

12 MR. RIAL: Joel?

13 MR. HASSELL: I think standards are great. I think
14 everybody should have one. The problem that we are going to run into --
15 and I really do believe it is going to help mitigate the transition
16 process of moving from one operator to the next -- is that as standard
17 are adopted we will find that we can write maybe not once but, you know,
18 one and a half times or 1.1 times and then publish across a bunch of
19 different platforms.

20 I think the larger issue beyond the standards though really
21 gets into the various content models that are being, that are going to
22 be adopted by the network operators themselves, because even if there

1 was ubiquity right now and everybody agreed that Liberate was the way to
2 go, and I am --

3 MR. LIMPE: I like that idea.

4 MR. HASSELL: -- and I am sure Dave would happy to hear
5 that.

6 [Laughter.]

7 MR. HASSELL: And there was essentially one standard from a
8 platform perspective, we still have the issue of what do the network
9 operators want to see from their branding proposition and what tools and
10 infrastructure do they have in place to support that, because aside from
11 just publishing, aside from just the platform standards themselves
12 people are adopting different e-wallet strategies, different shopping
13 cart metaphors, different e-mail systems -- it goes on and on in terms
14 of the core services that are integrated as part of this whole package,
15 this platform package that the network operators are going to be putting
16 together.

17 They also have different ideas in terms of branding
18 propositions, different rules and different navigation paradigms that
19 they want to put forward, so even if I were to write once for a Liberate
20 running on Charter, for example, and if that was what happened, I might
21 not be able to take that same content and take it in an unmanipulated
22 fashion and simply have it run on a Comcast with again a Liberate

1 platform because the content models and the presentation models might be
2 substantially different.

3 I think that is one of the real distinctions between the
4 Internet and the ITV space is that there is a branding proposition that
5 comes from the content delivery vehicle being the operator.

6 MR. RIAL: Mary Pat, how do you see the content branding
7 versus Charter's branding coming together in this environment?

8 MS. BLAKE: Well, clearly we are asking our content
9 providers to help us through unique content. We do feel that having
10 unique content on the Charter service is an advantage, frankly, and so
11 to that extent I think we will continue to feel strongly about that.

12 At the same time, I guess I am interested in what you might
13 suggest so that this turns into a little bit more of a win-win for you
14 all, so you don't get caught kind of having to reinvent the wheel every
15 time a new MSO comes forward.

16 MR. HASSELL: I think the win-win prospect we are looking
17 for there is really towards Dave at the other end here. He doesn't want
18 to have to provision his content across 14 different platforms and
19 amongst those 14 different platforms another 20 different content
20 models.

21 Intelocity obviously is a professional services company in
22 this space is focused on helping Dave work in MSO space across the tools

1 that we are talking about here.

2 I think our proposition as a threshold services company is
3 going to be understanding the development models and developing good
4 development practices that allow us to leverage the content that is
5 built and be able to take a core piece of that and move it from content
6 model to content model and not incur a 2X, then a 3X, then a 4X cost in
7 doing that.

8 It is not going to be -- I don't believe right now that
9 there is, even again as I said earlier, there's going to be a write
10 once, run many tool in place, simply because of the branding issues
11 associated with the various operator content models and I think it is
12 going to be companies positioned in the professional services space
13 initially that work with one of the content partners and the operators
14 to come up with strategies that allow them to minimize that.

15 SPEAKER: I agree with Joel. It is a tough proposition as a
16 content provider but in the end the cable operator like Charter has to
17 be in control of the user interface. It is their brand. They are
18 creating a buying experience not with Music Choice but across all of
19 their content and so that is clean. What has to happen is hopefully
20 what Charter won't do is decide what the technology behind that has to
21 be, so that we can create an application to a standard and then utilize
22 companies like Intelocity to help us interface with the Liberates and

1 the Peaches and everybody else and the Respond TVs, and there is going
2 to be some modification on each platform for a Comcast version versus
3 Charter, but if we hold that down to 15 to 25 percent of the work, that
4 is one thing.

5 If, on the other hand, an operator decides it wants
6 different technical standards that are behind the application, then it
7 will stop television commerce in its tracks because then -- right now,
8 the biggest investment we are making is in the application to do this
9 type of work, but if we had to -- if all we are doing is developing the
10 guts and then we need to interface to each of these platforms, if the
11 guts had to change for each operator and for each platform we couldn't
12 even start it.

13 SPEAKER: I think that, I feel like we are being too soft
14 here, in a way, or something. I think what Mary Pat said about well,
15 what can I do to help is maybe the most important thing I have heard.

16 I think anything less than a write once, read anywhere
17 solution is absolutely unacceptable for this industry and this business
18 and to even go into it with the idea that it will be okay to have a 10
19 or 15 or 20 or 15 percent problem is to me unacceptable.

20 As a company we have been in a unique position. We are
21 focused on providing an infrastructure and services for programmers so
22 that they can provide interactivity and for their advertisers and when

1 we look at it, we know how -- what the problems are, how when you will
2 write one application it will look perfect on one and then it will get
3 fuzzy on the next. The borders will blur, whatever the case may be. In
4 some cases the application might not even work and I look at the cable
5 industry and say, well, with the specter of increasing competition from
6 satellite, with increasing competition from TelCo's doing DSL back
7 channels, to go into this with anything less than it is going to work as
8 well as and as cost effectively as the Internet is today to me is
9 unacceptable.

10 I believe where that pressure though has to come from are
11 from the cable companies saying this is what it is going to be and it
12 can't be anything else, and if we have to step up and make sure that we
13 are working as an industry to make sure that works, then this business
14 can really take hold and that experience that you want to provide your
15 customers can actually start to happen in a big way.

16 MS. BLAKE: Well, I guess I am a little confused.

17 Is that the situation right now, truly? -- because, frankly,
18 I don't know precisely what it is that other MSOs are working on. I
19 mean I hear things but it is -- you know, I don't know if -- how big a
20 problem is this right now?

21 MR. FISHER: Well, I wouldn't call it, from our point of
22 view I wouldn't call it a huge problem. It is that extra 15-20-30

1 percent extra work, but we are talking about such small volume right
2 now. We are talking about, you know, we have six, eight programming
3 partners and others have a few more, a few less, but the truth is the
4 bulk of the industry hasn't really jumped into this, that the number of
5 programs they might be enhancing or number of advertisers they might be
6 enhancing are very small.

7 The real issue is when this hits critical mass, and that is
8 sort of the whole point -- if Charter goes in and uses, say, Liberate,
9 and then another MSO uses another middleware and different ones in
10 different boxes, that needs to be a business decision that has a lot to
11 do with an awful lot of issues, but at the end of the day certain basic
12 application, particularly those, and the reason we are very sensitive to
13 it is remember that we are not about your electronic program guide or
14 the mall that you are creating, which is really unique to you, the
15 Charter mall or whatever it is you end up calling it, or the Charter
16 electronic program guide.

17 We are talking about servicing and providing services for
18 national programmers and national advertisers and so the reason that I
19 am so emotional about this is that it really requires an understanding
20 that unless those companies -- it is one thing to write the application
21 once for the AT&T mall and once for the Charter mall. It is very
22 different for Ford Motor Company to sit there and want to enhance a

1 commercial and be in a position where they have to send one enhancement
2 that will work on Liberate and one on Microsoft or one that will work on
3 Charter and one that will work on AT&T or one that will work on GI and
4 one on SA.

5 That just can't happen and won't work.

6 MS. BLAKE: It seems like what you are suggesting makes all
7 the sense in the world and so obviously I am not the techno guru on the
8 panel. I am after a unique experience for my customers so that they
9 understand that they can't go to any other competitor and get the same
10 terrific experience. If we can do that along with keeping what you are
11 talking about, costs down throughout the other industries that are
12 becoming part of this, then that is the win-win all the way around.

13 MR. LIMPE: You know, the burden of this is on -- I will use
14 your language -- the vendors, and we are your vendors, okay, so I
15 wouldn't make us solve those problems.

16 The interesting thing, anarchy rules on the Internet and
17 there is nobody to solve big, hard problems. You can't go to one
18 persona on the Internet -- you know, where do you go?

19 The good news here is that cable was a little more
20 controlling. There is bad news to that sometimes, but I think in
21 general you have the ability to define your future and I think that -- I
22 hate to always point to Europe but I think Silicon Valley has great

1 interesting ideas sometimes but Europe is very far ahead on this than we
2 are.

3 It has happened over there and they already went down once
4 the road of proprietary systems and failed and failed in a big way.
5 Millions of units are out there that are proprietary that people just
6 can't stand. They don't like it.

7 Although I agree that nobody has ever made money off
8 standards, I would tell you that the consumer has benefitted from
9 standards, so it is a necessary thing. As a vendor I am not going to
10 make a fortune off coming to a common understanding with Microsoft. It
11 is hard, you know? These are difficult discussions in tight rooms, but
12 the fact of the matter is that you have to do it to make it successful
13 and the back end of the stuff, where the e-wallet is, where you are
14 sending a response network to, that is for you to make deals and
15 carriage agreements and that kind of stuff but long-term you have to put
16 the burden on people like us to solve the hard problems for you.

17 If you take it to the consumer or you try to do it yourself
18 I am just convinced that we will have 10 different solutions in the
19 United States and that is just unacceptable because I guess Ford won't
20 deal with it and the consumer won't deal with it.

21 MR. RIAL: I am hearing that today there may be different
22 content models coming all of the MSOs.

1 How can we ensure that today the content models that are
2 being constructed are going to be adopted by commerce application
3 developers, content developers? Joel?

4 MR. HASSELL: I am also at a loss to answer and the reason
5 is that we are kind walking through some difficult conversation here,
6 but the fact is that there is not a standard, the bottom line is.

7 I understand Richard's passion here because as somebody who
8 wants to help the content people get on the platforms, we would like to
9 be able to write the thing once for them. It is a great business
10 proposition, as opposed to having to learn a bunch of different
11 platforms and when somebody comes out with something different have to
12 learn how their environment differs and make sure that the content
13 providers don't have to pay over and over again, but the standards don't
14 yet exist.

15 There are things -- we are moving forward with some of them
16 and I am pleased to see that -- and I appreciate also what Dave was
17 saying about Europe, but I also know that UPC for example is adopting
18 different standards in terms of moving forward in Europe, and while they
19 still comply to some of the DVB standards on a platform base, what th
20 UPC is doing is a little bit different than what is happening in the UK,
21 for example, and so I think even in Europe there is some disparity in
22 terms of what will be the platform standard and I am hopeful about that.

1 I am hopeful that the operators will come together with
2 content models that will work well for the content providers, but
3 sitting here right now I've got to tell you I don't see it and I don't
4 see it inasmuch as -- I don't see it happening immediately and I don't
5 see and inasmuch as we have had to develop it, clearly it's been
6 demoware and prototypeware but we have had to develop applications right
7 now for some of content partners and I must tell you in writing for a
8 Liberate platform versus an MSTV platform and again for an AT&T versus
9 another operator, it is a different proposition.

10 I have got two different teams of people that do the work.

11 As I said earlier, we have developed some core pieces, some
12 things that are fairly algorithmic and we're able to -- that are buried
13 under the interface pieces of these thing, but at some point we have to
14 integrate them with all these other pieces that hang out there and there
15 is nothing yet that encapsulates all of that for somebody who is trying
16 to develop content right now.

17 MR. FISHER: I would suggest that the missing link today is
18 mostly the programmers, at least from our point of view in our world.

19 Music Choice is a very rare player who has spent a lot of
20 time studying and a lot of time focusing on and trying to learn about it
21 and wants to be an early adopter of it, but if you really cut across the
22 spectrum, while there have been lots of announcements they are

1 relatively light and if the programmers themselves were probably more
2 involved in making a bigger investment early driving it, it probably
3 would result in a much more aggressive understanding of the issues
4 involved because they are the commonality. They are the ones that cut
5 across every MSO and every platform, more so than anyone else, and their
6 advertisers as well, but I don't think we can expect the advertisers to
7 get down to studying the standards issues but we should expect that of
8 the programmers.

9 MR. RIAL: David, Richard has been talking all the various
10 potential malls -- call them malls, call them walled gardens, whatever
11 they may be. Your approach to T-Commerce is a bit different, as I
12 understand it, at least in the early stages. Could you enlighten us on
13 that, the broadcast delivered model?

14 MR. DELBACARO: Well, what we think is, as I said in the
15 beginning, that there is an opportunity here that may be specific to
16 music but may not be where I want to go back to something Mary Pat was
17 saying at the beginning.

18 What does the consumer really want to do here? We can make
19 CDs available to people but the truth is when it comes to music people
20 have never had a chance to consume the product the way that we think in
21 Music Choice they would really want to, and that is I hear it, I now can
22 have it, and I can do anything I want with it.

1 There is a lot of carping in the music business because
2 people for example buy whole CDs when they really like a song, and so
3 what I think is going to be opportune here is people are going to be
4 able to buy the song as they hear it and build a library of music that
5 is song-based rather than CD-based, rather than 13 cuts at a time based,
6 and that there is a unique opportunity that really is only available
7 through this platform.

8 If you have to go out and purchase, if you have to go and
9 select your library, you are never really going to get there, but if you
10 can accumulate music as you listen to it and like it, and as we can
11 learn that behavior and then send you other songs as we already
12 broadcast them and we know for example that you are very much into
13 alternative rock, and we are already broadcasting an alternative rock
14 channel but we tag the one that we know that you are going to want and
15 add that to your library, we can build personalized music libraries for
16 you and you can purchase your own personalized library without ever
17 having to do any shopping, without ever having to filter through and
18 make a lot of decisions, and so I think the opportunity to consume music
19 in a very different way and a more consumer-friendly way is going to be
20 very dramatic compared to years past.

21 Getting back to what these guys said, there is unfortunately
22 no standard and I am, like Joel, hopeful that ADFEF is going to be

1 adopted as a standard but right now it is a leap of faith and, as
2 Richard said, we are a bit out in front compared to other people.

3 We are making that leap of faith, so we are investing a lot,
4 hoping that ends up the standard and if we are right we will be okay and
5 if we are not right, we will have to reinvest in a lot of different
6 ways.

7 MR. RIAL: So how are you approaching that today, if you are
8 out in front? How are you approaching this --

9 MR. DELBACARO: Well, what we are doing, because in order to
10 go out in front you have to make sure that everybody along the way is
11 going to say, okay, well, it is okay to do it the way you are doing it,
12 so besides analyzing all the different approaches, what we are trying to
13 make sure we do is make sure especially all of the operators are okay
14 with where we are headed and so we have not only analyzed how to do it
15 and for example to use ADFEF but made sure along the way that a Charter
16 and Time Warner and a Direct-TV and a Comcast are all going to say,
17 okay, that's all right, we'll accept that.

18 Then what we will do is we will have to interface with each
19 of the middleware players and that is that extra percentage which, I
20 agree with Richard, it would make our life a lot easier if everyone
21 reached the same place, but the truth is there is no body of people even
22 working together on it right now. There's no group of people that are

1 working, for example to create this standard.

2 I think what is really going to happen is that there is this
3 general sense that ADFFEF is going to be the right standard, and the more
4 people who are upfront who adopt it, the more the people who are
5 following are just going to do it because, after all, there are systems
6 and applications already working.

7 SPEAKER: I have been doing this a long time, nine years,
8 which is a long time and so, you know, the difference between now and
9 then -- I am not saying we are perfect, all right, but I have a feeling
10 that some people may be scared to death, okay? -- is that the Internet
11 is here and I do agree that there are tweaks we have to do, there are
12 things we have to get better on.

13 We constantly have to do this, but if you want to do a
14 secure transaction from a TV set today to a back-end, to the Internet,
15 of any infrastructure, and do you want to do it on Microsoft, do you
16 want to do it on Liberate, it is an SSL 40 or 128 bit encrypted
17 transaction -- automatically.

18 You no longer have to worry about security certificates.
19 You never think about that, okay?

20 If you go back to the full service network five years, 10
21 years ago -- five years ago, security was hard-coded based on a
22 proprietary conditional access system. It was different per box. That

1 is just one example of 100 things that have been solved.

2 Now are there 100 more? Are there 50 more? Are there 25
3 more? I don't know the right number but I can tell you that we have
4 come a huge amount of distance. I am not saying it is perfect yet but
5 there are so many things you don't have to think about now that have
6 been solved.

7 I think that as we actually -- there may not have been
8 announcements on people working on this, but I assure you there are
9 people right now in the room thinking about the exact thing that I have
10 to say -- but the solution, the end-end solution here is much bigger
11 than just ADFEF.

12 It is much bigger than just Java. It is much bigger than
13 MHP. It is -- this is a very, very big complex system. On average, the
14 people that are installing the stuff, by the time they spend the money
15 on forming all these companies, doing the content aggregation, building
16 a big service, making it work, it is not unusual for a network operator
17 to put 25 to 100 million dollars into these projects. That is the kind
18 of scope and scale that we are talking about here and so you can't take
19 these lightly and I think, going back to the original question, is a
20 check and the egg thing.

21 People will write content to where the eyes are. I think it
22 is our duty as part of the industry to make sure that we try to bring

1 this together, but if we didn't if there is enough eyes, if DirectTV or
2 Charter decide to go out and build their own thing, completely
3 proprietary, and went to Dave and said I want your music, he's going to
4 do it.

5 What we're just trying to do is make it more efficient.
6 What this does is it saves a little bit of the money that they would
7 have done doing it proprietary so that we can spread that around a
8 little bit more and all make a little bit more money. That is what it
9 is about and the consumer hopefully benefits in the end.

10 SPEAKER: Well, I agree with that, by the way. We have been
11 working, we have been threatening to do what we are going to do this
12 fall for four years and we haven't been able to and the reason is
13 because there has been no convergence on how to get it done, and there
14 has been so much convergence that now we can make the leap of faith,
15 because there are very few variables left and so -- I don't mean to
16 imply that there's -- it's a very, with a very fearful step that we
17 tried it.

18 It is the exact opposite -- four, three and two years ago we
19 could not proceed. There were just too many things that people, too
20 many different directions people are going to. I don't think that is
21 the case now.

22 I think where we are headed with 95 percent certainty, we

1 are on totally safe group and the operators do too.

2 SPEAKER: I would also add that it is working in practical
3 reality for us with applications that we have on the air from both
4 programmers and advertisers. When we get "Would you like more
5 information this car?" "Would you like to enter this contest?" -- a
6 healthy percentage of the responses we get back -- we mostly focusing
7 today on there's 500,000 WebTV Plus boxes that what we really care about
8 is an Internet based technology is what we are talking about, so we need
9 a browser, an IP [inaudible] rendering in the box, and the WebTV Plus
10 box has that, but a healthy percentage of the responses we get come back
11 with Liberate e-mail addresses, meaning that we sent it out once -- the
12 same application, the same enhancement on an advertisement or on a
13 program and the e-mail response "Yes, I am more interested" came back
14 from a Liberate box. We wrote it once and it worked.

15 It doesn't mean that when the person watching the television
16 via Liberate box didn't see a slight different variation on what the
17 enhancement looked like.

18 SPEAKER: This concludes Side 1.

19 [END OF TCOM, SIDE 1.]

20 [BEGINNING OF TCOM, SIDE B]

21 SPEAKER [Continuing]: The return path has been there, so I
22 agree with you. Now is the time, and I am jumping on the one bandwagon